

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of fabricating a semiconductor device comprising:

- forming a first layer on a semiconductor element;
- forming a second layer on said first layer, said second layer being made of a material having material[[,]] an etching rate [[of]] which changes in accordance with kind and concentration of dopant atoms implanted therein;
- implanting dopant atoms into said second layer;
- forming a third layer on said second layer;
- forming one or more first openings in said third layer;
- etching said second layer using said third layer as a first mask, thereby forming one or more second openings in said second layer; and
- forming one or more contact holes in said first layer using at least said second layer as a second mask,
- wherein a plurality of said first openings are formed in said third layer as having a same diameter, during said forming one or more first openings,
- a plurality of said second openings are formed in said second layer as having

different diameters, during said etching, and

a plurality of said contact holes are formed in said first layer including at least one large-diameter contact hole and at least one small-diameter contact hole, during said forming one or more contact holes.

Claim 2 (Currently Amended): The method according to claim 1, wherein said first mask used ~~[[in]]~~ during said forming ~~process~~ of one or more contact holes has a multilayer structure including said second layer and said third layer.

Claim 3 (Currently Amended): The method according to claim 1, further comprising:
annealing said second layer after said implanting ~~process~~ of dopant atoms,
thereby activating said dopant atoms.

Claim 4 (Canceled)

Claim 5 (Currently Amended): A method of fabricating a semiconductor device comprising:

forming a first layer on a semiconductor element;

forming a second layer on said first layer, said second layer being made of a material having an etching rate which changes in accordance with kind and concentration of dopant atoms implanted therein;

implanting dopant atoms into said second layer;
forming a third layer on said second layer;
forming one or more first openings in said third layer;
etching said second layer using said third layer as a first mask, thereby forming
one or more second openings in said second layer; and
forming one or more contact holes in said first layer using at least said second
layer as a second mask ~~The method according to claim 4,~~

wherein said implanting ~~process of~~ dopant atoms is performed ~~in such a way so~~
that said dopant atoms are implanted into said second layer inside a specific area and
are not implanted into said second layer outside said specific area~~[[;]],~~ and

said forming ~~process of~~ one or more first openings is performed ~~in such a way so~~
that at least one of said first openings is formed in said third layer inside said specific
area and ~~the rest~~ others of said first openings ~~[[is]]~~ are formed in said third layer outside
said specific area.

Claim 6 (Currently Amended): A method of fabricating a semiconductor device
comprising:

forming a first layer on a semiconductor element;
forming a second layer on said first layer, said second layer being made of a
material having an etching rate which changes in accordance with kind and
concentration of dopant atoms implanted therein;

implanting dopant atoms into said second layer;
forming a third layer on said second layer;
forming one or more first openings in said third layer;
etching said second layer using said third layer as a first mask, thereby forming
one or more second openings in said second layer; and
forming one or more contact holes in said first layer using at least said second
layer as a second mask ~~The method according to claim 4,~~

wherein said implanting ~~process of~~ dopant atoms is performed in such a way so that said dopant atoms include first dopant atoms and second dopant atoms different from said first dopant atoms, said first dopant atoms are implanted into said second layer inside ~~[[said]]~~ a specific area, and said second dopant atoms are implanted into said second layer outside said specific area~~[[;]]~~, and

said forming ~~process of~~ one or more first openings is performed in such a way so that at least one of said first openings is formed in said third layer inside said specific area and ~~the rest~~ others of said first openings ~~[[is]]~~ are formed in said third layer outside said specific area.

Claim 7 (Currently Amended): The method according to claim 1 ~~[[4]]~~, wherein said implanting ~~process of~~ dopant atoms is performed in such a way so that said dopant atoms are implanted into a whole area of said second layer.

Claim 8 (Original): The method according to claim 1, wherein said first layer is an interlayer insulating film.

Claim 9 (Original): The method according to claim 1, wherein said second layer is a polysilicon layer.

Claim 10 (Currently Amended): The method according to claim 1, wherein said second layer is ~~formed of~~ a dielectric material.

Claim 11 (Original): The method according to claim 1, wherein said third layer is a resist layer.

Claim 12 (Currently Amended): The method according to claim 1, wherein said forming ~~process of~~ one or more first openings in said third layer is performed using photolithography.

Claim 13 (Original): The method according to claim 1, wherein said dopant atoms are either group V atoms or group III atoms.

Claim 14 (Original): The method according to claim 6, wherein said first dopant atoms are group V atoms and said second dopant atoms are group III atoms.

Claim 15 (Currently Amended): The method according to claim 1 [[4]], wherein[:] said semiconductor element has a gate, a source and a drain;

said at least one large-diameter contact hole is formed directly above said gate;

and

said at least one small-diameter contact hole is ~~holes are~~ formed directly above at least one of said source and said drain.

Claim 16 (New): The method according to claim 6, wherein said first mask used during said forming one or more contact holes has a multilayer structure including said second layer and said third layer.

Claim 17 (New): The method according to claim 6, further comprising:

annealing said second layer after said implanting dopant atoms, thereby activating said dopant atoms.

Claim 18 (New): The method according to claim 6, wherein said first layer is an interlayer insulating film.

Claim 19 (New): The method according to claim 6, wherein said second layer is a polysilicon layer.

Claim 20 (New): The method according to claim 6, wherein said second layer is a dielectric material.

Claim 21 (New): The method according to claim 6, wherein said third layer is a resist layer.

Claim 22 (New): The method according to claim 6, wherein said forming one or more first openings in said third layer is performed using photolithography.

Claim 23 (New): The method according to claim 6, wherein said dopant atoms are either group V atoms or group III atoms.